

I. Product Description:

Our pure granulated sugar is a natural, ready-to-eat, food grade product produced from purified, filtered, and crystalized juice from domestically-grown sugar beets or raw cane sugar. Granulated sugar is minimally processed, kosher certified, halal suitable, vegan suitable, and screened to specification. This product can be referred to Fine Granulated Sugar or Extra Fine Granulated Sugar depending on region. Typical uses include confectionary, beverages, jam and marmalade, baked goods, canning, dairy products and fermentation.

II. Physical and Chemical Characteristics:

| PARAMETER | SPECIFICATION | UNIT OF MEASURE | TEST METHOD(S) | COA |
|-----------------------------------|---------------|------------------------|---------------------------------|-----|
| Sucrose by Polarization | ≥ 99.85 | % | ICUMSA GS2-1 (2011) | No* |
| Color | ≤ 45 | ICUMSA Units, IU | ICUMSA GS2-10 (2011) | Yes |
| Turbidity | ≤ 20 | ICUMSA Units, IU | ICUMSA GS2-18 (2013) | No |
| Conductivity Ash | ≤ 0.025 | % | ICUMSA GS2-17 (2011) | Yes |
| Moisture | ≤ 0.04 | % | Moisture Analyzer | Yes |
| Sediment | ≤ 3 | ppm (mg/kg) | Filtration—8 Micron, Visual | Yes |
| Sulfur Dioxide (SO ₂) | ≤ 6 | ppm (mg/kg) | Titrimetric | No |
| Particle Size USS 20 | 0—2 | % Retained | US Sieve/Optical Particle Sizer | No |
| Particle Size USS 30 | 0—20 | % Retained, Cumulative | US Sieve/Optical Particle Sizer | Yes |
| Particle Size USS 100 | 90—100 | % Retained, Cumulative | US Sieve/Optical Particle Sizer | Yes |
| Particle Size USS 100 | 0—10 | % Passing | US Sieve/Optical Particle Sizer | Yes |

* Attribute not tested per lot. Statement of compliance available upon request.

III. Ingredients:

Sugar

IV. Microbiological:

Free of pathogenic microorganisms based on physical characteristics and empirical evidence. Microbiological values are not included on certificates of analysis.

V. Country of Origin and Manufacturing:

This product is manufactured in the United States from domestically grown crops. Domestic manufacturing facilities include products manufactured from Amalgamated Sugar, Southern Minnesota Beet Sugar Cooperative, and Spreckels Sugar.

VI. Screening and Metal Detection:

Product is screened and passed through validated metal detectors before packaging or loading.

VII. Regulatory:

This is a food grade product that is generally recognized as safe by the Food and Drug Administration (FDA) 21 CFR 184.1854 and suitable for Canada FDR B.18.001. Manufacturing and handling facilities are registered with the FDA and comply with Current Good Manufacturing Practices, 21 CFR 117, and all other FDA or national regulations. Label product as sugar or sucrose.

VIII. Packaging Information:

Packaging materials are FDA-compliant and approved for direct food contact. Packaged products are sealed or sealed with unique, tamper-evident features.

| PACKAGING / DELIVERY | MATERIAL | SIZE |
|-------------------------------|--|---------------------|
| Industrial Bag | Polyethylene or multiwall kraft paper. | 50 lb. |
| Industrial Tote/Supersack | Flexible Intermediate Bulk Container (FIBC) polyethylene lined. | 1000–2500 lb. |
| Pneumatic Bulk Trailer | Sugar-dedicated, food grade bulk pneumatic trailer. | 40,000–70,000 lb. |
| Covered Hopper Railcar | Sugar-dedicated, bulk railcar with gravity or vacuum pneumatic unloading capabilities. | 200,000–220,000 lb. |
| Pressure Differential Railcar | Sugar-dedicated, bulk railcar with pneumatic unloading capabilities. | 200,000–220,000 lb. |

IX Storage and Handling:

Granulated sugar should be shipped and stored under ambient temperature conditions with a recommended relative humidity of less than 70%. Avoid exposure to rapid fluctuations of temperature or humidity and avoid storing near odiferous products or environments. Products stacked during long-term storage may develop slight compaction which can be removed with mild pressure.

X. Shelf Life / Best if Used By Information:

Granulated Sugar, if stored under the above constant conditions, is considered non-perishable and will not deteriorate chemically or microbiologically. Deviations to storage conditions may result in product clumping, but the product is still safe to consume. For product quality and flowability, granulated sugar is best if used before two (2) years from the date of manufacture.

XI. Allergen Information:

Allergen-free product. Please see the full allergen statement for more information.



Reviewed/Revised: 02/26/2024

For questions or inquiries, please email quality@natsugar.com

The above statements are to be used as a guide only. All the above information is true and accurate to the best of our knowledge. However, since the conditions of use are beyond our control, all recommendations or suggestions are made without guarantee, express or implied on our part. We disclaim all liability in connection with the use of the information contained herein or otherwise, and all such risks are assumed by the user. Nothing contained herein shall be construed to infer freedom from patent infringement. We further expressly disclaim all warranties of merchantability and fitness for a particular purpose.